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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,426	11/29/2001	Tyler Thorp	03226/136001; P6821	6431
32615	7590	03/29/2005	EXAMINER	
OSHA & MAY L.L.P./SUN 1221 MCKINNEY, SUITE 2800 HOUSTON, TX 77010			THOMPSON, ANNETTE M	
			ART UNIT	PAPER NUMBER
			2825	

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	<b>Application No.</b> 09/997,426	<b>Applicant(s)</b> THORP ET AL.	
	<b>Examiner</b> A. M. Thompson	<b>Art Unit</b> 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 13-15 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1,3-5,7-9 and 13-15 is/are rejected.  
 7) ☒ Claim(s) 2,6 and 10 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

Applicants' amendment to 09/997,426 has been examined. Claim 1, 5, 9, and 13 are amended. Claims 1-10, and 13-15 are pending.

1. Applicants' amendments and remarks have been carefully considered but are not considered persuasive. The applicable rejections from the prior office action are incorporated herein.

#### ***Specification***

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Applicants fail to provide antecedent basis for the amendment which recites *direct* propagation of a signal.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

#### **Rejection of claims 1, 3-5, 7-9, and 13-15**

4. Claims 1, 3-5, 7-9, and 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Haritsa et al. (Haritsa), US Publication 2003/0074642. Haritsa discloses

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a method and apparatus for determining clock insertion delays for a microprocessor design having a grid-based clock distribution.

5. The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

6. Pursuant to claims 1 and 5 which recite [a]n integrated circuit (Hartisa discloses a microprocessor design, Abstract and [0001, 0002, 0028]) comprising a clock driver disposed on the integrated circuit [Haritsa, 0009]; a clock grid disposed on the integrated circuit (Haritsa, Fig. 3, L2 grid), wherein the clock driver is disposed outside a region of the clock grid (Haritsa, Fig. 4, illustrates the clock drivers outside of the clock grid); and at least one interconnect arranged to directly propagate a signal from an output of the clock driver past an exterior region of the clock grid to a connection point residing at a non-exterior region of the clock grid (Haritsa discloses clocked elements within the L2 grid, 0010).

7. Pursuant to claim 3, 7 and 15 wherein the at least one interconnect is arranged in a wire tree configuration (Haritsa, Fig. 4, illustrates a wire tree configuration).

8. Pursuant to claim 4 and 8, wherein the wire tree configuration is balanced (Haritsa, Fig. 4, L5-L3 illustrates a balanced wire tree configuration).

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9. Pursuant to claim 9 which recites [a] method for reducing clock skew comprising sending a clock signal from a clock driver to a first component through a connection point on a clock grid (Haritsa, Fig. 4), wherein the clock driver resides outside a region of the clock grid (fig. 3); and sending the clock signal from the clock driver to a second component through the connection point (Fig. 3), wherein the clock signal is directly propagated from an output of the clock driver past an exterior region of the clock grid to the connection point (Fig. 3), and wherein the connection point is at a non-exterior region of the clock grid.

10. Pursuant to claim 13, which recites a transmission structure for driving a signal onto a clock grid, comprising an interconnect connecting a clock driver to the clock grid (Figs. 3, 4), wherein the clock driver resides outside of a region of the clock grid (Haritsa discloses clocked elements within the L2 grid, 0010), wherein the interconnect directly connects the clock driver past an exterior region of the clock grid to a connection point residing at a non-exterior region of the clock grid (Fig. 3).

11. Pursuant to claim 14, wherein the transmission structure is balanced (Haritsa, Fig. 4, L5-L3 illustrates a balanced wire tree configuration).

#### **Remarks**

12. Applicants' amendment lacks specification antecedent basis for *direct* propagation of a signal. Nevertheless, Haritsa does directly propagate a signal from an output of the clock driver so the addition of this claim language does nothing for claim clarification or to overcome the rejection of Haritsa.

***Allowable Subject Matter***

13. Claims 2, 6, and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. The following is a statement of reasons for the indication of allowable subject matter: In a method for reducing clock skew, the prior art does not teach positioning the interconnect that connects the clock drivers to the clock grid so that a clock signal driven within an interior region inside the periphery of a clock grid structure has less skew than a clock signal traveling along the periphery of the clock grid within the clock grid structure.

***Conclusion***

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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16. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m..

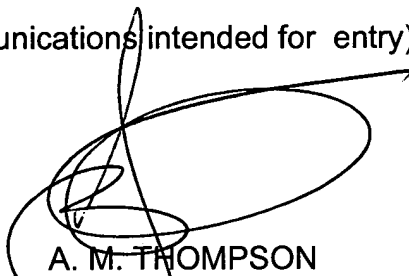
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

17. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)



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